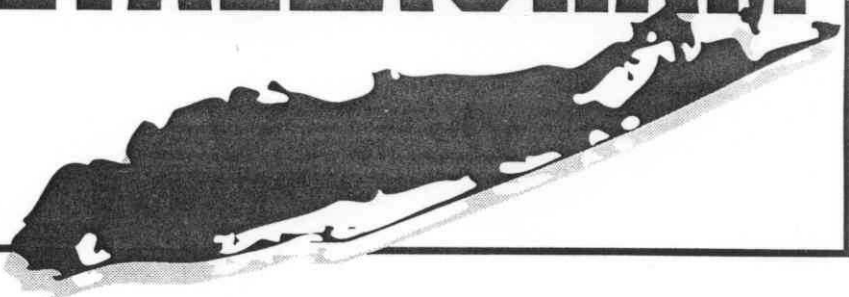




# METALLAGRAM



LONG ISLAND CHAPTER

Volume 53 Issue 1

Chapter website: <http://www.matscieng.sunysb.edu/asm/>

## Welcome to the 2011-2012 Year

**First Meeting . . . . . Wednesday, September 21, 2011**

**Where . . . . . Mauricio's Orlando's II, St. James, NY**

**Topic: 16 Years of Failure Analysis at BNL**

**Speaker: Dr. Carl Czajkowski, BNL**

*Social hour ... 6:00 pm Dinner ... 7:00 pm Meeting ... 8:00 pm.*

*Members ... \$22 Guests ... \$25 ASM 25 years ... \$20 Students ... \$12*

*(New and recently transferred-in members free!)*

**Reservations appreciated - call Peter Indrigo (631-589-6666.)**

## **WELCOME TO THE CHAPTER!**

*Katharine Abbitt, Park Electrochemical Corp. Huston Fernandez, BNL Alex Fiakos, Metal Improvement Co.*

*Ross Lunato and Tim McCreight, Sulzer-Metco Stanley Michaud, DCMA*

*Yang Tan, SBU Jason Trelewicz, MesoScribe*

All new members, including those who have transferred in from another Chapter, are invited to dine free at a regular meeting of their choice. Please take us up on this offer - come along to the meeting and introduce yourself. This is an excellent way to meet with other Chapter members and to establish new business and social relationships in the area.

## OUR SPEAKER

Dr. Czajkowski is a Senior Metallurgist at Brookhaven National Laboratory and the Group Leader of the Nonproliferation and Homeland Security Field Support Group in the Nonproliferation and National Security Department. He has a BS in Metallurgical Engineering from the University of Missouri/Rolla, a MS in Metallurgical Engineering from the Polytechnic Institute of New York, and a PhD in Materials Science and Engineering from SUNY/Stony Brook, where he is currently an Adjunct Professor. Dr. Czajkowski began his career in 1971 as a Quality Control Materials Engineer at United Nuclear, Inc., involved in building reactors for the naval nuclear program. In 1973 he moved to EBASCO Services Inc. as a Quality Assurance Engineer, involved in the building of civilian nuclear power plants. In 1975 he joined the Long Island Lighting Company where he advanced to become the Chief Welding Supervisor at the Shoreham Nuclear Power Station. Dr. Czajkowski joined Brookhaven National Laboratory in 1980 and has held various positions (Group Leader, Associate Division Head, and Division Head) in the Departments of Nuclear Energy, Advanced Technology, and, currently, Nonproliferation and National Security. His current responsibilities include being Principal Investigator and Facility Manager for the operation of the Radiation Detector Test and Evaluation Center (RADTEC) facility in support of the U.S. Department of Homeland Security. The RADTEC team both evaluates commercial off-the-shelf radiation detectors and builds new types of detectors for DHS efforts. He has also provided support to the U.S. Department of Transportation in evaluation of oil pipeline integrity.

## HIS TOPIC

Brookhaven National Laboratory for many years conducted studies related to the failure of nuclear materials and components. These investigations (1985-2000) included both field and laboratory studies for various U.S. government agencies in the areas of metallurgy, welding, materials evaluation, failure analysis, corrosion and life extension. Failure and root cause analyses included radioactive and non-radioactive components from nuclear reactors and commercial fossil fuel plants for major materials systems currently in use. Components evaluated included pumps, valves, piping, welds, supports, bolts and fasteners, flanges, fittings, tanks and vessels. Failure modes encompassed fatigue, corrosion fatigue, stress corrosion cracking, hydrogen embrittlement, wear, thermal shock, temper brittleness, overheating, de-alloying, and erosion-corrosion. The results of these examinations which have previously appeared in various formats (formal and informal reports, journal articles, etc.) have been collected and summarized in this paper and will be discussed. This presentation has been accepted at the ASM MS&T Meeting in Columbus, OH this October.



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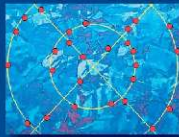
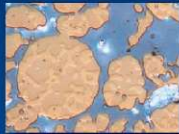
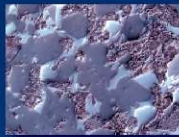
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**2011 John R. Weeks Scholarship Winners**

Octavia Williams of William Floyd High School (Mastic Beach) and Ethan Madigan of Bay Shore High School (Bay Shore) have been announced as the winners of 2011 John R. Weeks Scholarship, sponsored by the Long Island Chapter of ASM International. Both received a check for \$500 and a Joint ASM/TMS Student Membership. The scholarship is renewable for up to a total of four years.



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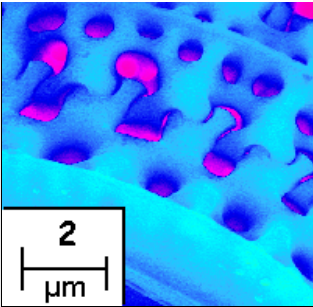
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Take the LIE to the Sagtikos/SunkenMeadow Parkway (Exit 53) and proceed north. At the first interchange, go onto the Northern State Parkway (NSP) East, towards Hauppauge. The NSP ends in two miles and you enter Rte 347/454. Travel past the government buildings for two miles. At the split in the highways, bear left onto Rte 347 (Nesconset Hwy). After three miles, there are three intersections: Terry Rd, Southern Blvd, and Lake Ave. Take Lake Ave north (left). At Rte 25 (Jericho Tpk/Middle Country Road), go left. The restaurant is immediately there, next to the Volvo dealership. The street address of the restaurant is 645 Middle Country Road (Rt. 25); their phone number is (631) 265-9228.




ASM President Mark Smith presents Jim Quinn with LIASM's Five-Star Chapter Certificate


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## Long Island Chapter Meeting Schedule

**Oct. 19, 2011** Place: Copper Wok, Hicksville  
 Speaker: Mark Campo, Veeco  
 Subject: Magnetic Materials

**Nov. 16, 2011** Place: Stony Brook University  
 Speakers: Senior Students  
 Topic: Design Projects and Feedback

**Dec. 14, 2011** Place: Pollo Rico, Centereach  
 Speaker: Joe Brady, BNL  
 Subject: Explosives

**Metro NY-NJ Chapter**  
 (website <http://www.asm.nynj.org/>)  
 (contact: Rich Lynch @ 201-891-8399)

No information available as yet on their program for 2011-2012.

**Long Island Metal Workers Society**  
 (website <http://www.limws.org>)

**Sep. 24, 2011** Tour of Webb Institute followed by John L. Busch speaking about his book "Steam Coffin"



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